Application No. 10/828,548
Response dated September 29, 2005
Reply to Restriction Requirement of September 29, 2005

LISTING OF CLAIMS:

1-55. (Canceled)

56. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering an antibody which binds amyloid β peptide, or to fragment thereof, thereby treating the subject having Alzheimer's Disease.

57. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering an antibody which specifically binds amyloid β peptide, or to fragment thereof, thereby treating the subject having Alzheimer's Disease.

58. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering an antibody which is targeted to amyloid β peptide, or to fragment thereof, thereby treating the subject having Alzheimer's Disease.

59. (Previously Presented) The method of claim 56, wherein the antibody is directed to amyloid β peptide, or fragment thereof.

60. (Previously Presented) The method of claim 56, wherein the antibody is directed to an epitope comprising the first N terminal residue of natural Aβ.

61. (Previously Presented) The method of claim 56, wherein the antibody is directed to an epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of Aβ.

62. (Previously Presented) The method of claim 56, wherein the antibody is directed to N-terminus-truncated amyloid β peptide fragment.

63. (Previously Presented) The method of claim 56, wherein the antibody is directed to an epitope comprising the C-terminal amino acid of a naturally occurring form of amyloid β.

64. (Previously Presented) The method of claim 56, wherein the antibody is directed to the Aβ 33-42 epitope.

65. (Previously Presented) The method of claim 64, wherein the antibody is 21F12.

66. (Previously Presented) The method of claim 56, wherein the antibody is directed to C-terminus-truncated amyloid β peptide fragment.

67. (Previously Presented) The method of claim 56, wherein the antibody is directed to the amyloid precursor protein, or a naturally occurring form of amyloid β.

68. (Previously Presented) The method of claim 56, wherein the antibody is directed to the amyloid precursor protein, or fragment thereof.

69. (Previously Presented) The method of claim 56, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific or bifunctional antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

70. (Previously Presented) A method of treating a patient having a disease or disorder characterized by amyloid beta deposition, comprising administering an effective dose of an antibody that binds amyloid deposits or a component thereof, thereby treating the subject having disease or disorder characterized by amyloid beta deposition.

71. (Previously Presented) A method of treating a patient having a disease or disorder characterized by amyloid beta deposition, comprising administering an effective dose of an antibody that specifically binds amyloid deposits or a component thereof, thereby treating the subject having disease or disorder characterized by amyloid beta deposition.

72. (Previously Presented) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition, comprising the step of administering an antibody which is targeted to amyloid β peptide, or to fragment thereof, thereby treating the subject having disease or disorder characterized by amyloid beta deposition.

73. (Previously Presented) The method of claim 72, wherein the antibody is directed to amyloid β peptide, or fragment thereof.

74. (Previously Presented) The method of claim 70, wherein the antibody is directed to an epitope comprising the first N terminal residue of natural Aβ.

75. (Previously Presented) The method of claim 70, wherein the antibody is directed to an epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of Aβ.

76. (Previously Presented) The method of claim 70, wherein the antibody is directed to N-terminus-truncated amyloid β peptide fragment.

77. (Previously Presented) The method of claim 70, wherein the antibody is directed to an epitope comprising the C-terminal amino acid of a naturally occurring form of amyloid β.

78. (Previously Presented) The method of claim 70, wherein the antibody is directed to the Aβ 33-42 epitope.

79. (Previously Presented) The method of claim 71, wherein the antibody is 21F12.

80. (Previously Presented) The method of claim 72, wherein the antibody is directed to C-terminus-truncated amyloid β peptide fragment.

81. (Previously Presented) The method of claim 70, wherein the antibody is directed to the amyloid precursor protein, or a naturally occurring form of amyloid β.

82. (Previously Presented) The method of claim 70, wherein the antibody is directed to the amyloid precursor protein, or fragment thereof.

83. (Previously Presented) The method of claim 70 or 72, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific or bifunctional antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

84. (Previously Presented) The method of claim 70, wherein the disease or disorder characterized by amyloid beta deposition is mild cognitive impairment, or Alzheimer's disease associated with Down's syndrome.

85. (Previously Presented) The method of claim 70, wherein the disease or disorder characterized by amyloid beta deposition is late or early onset Alzheimer's disease, SAA amyloidosis, hereditary Icelandic syndrome, multiple myeloma, mad cow disease, Creutzfeldt Jakob disease, sheep scrapie, mink spongiform encephalopathy, mild cognitive impairment, or Alzheimer's disease associated with Down's syndrome.

86. (Previously Presented) The method of claim 72, wherein the disease or disorder characterized by amyloid beta deposition is mild cognitive impairment (MCI), cerebral

amyloid angiopathy or congiophylic angiopathy, Alzheimer's disease associated with Down Syndrome, or inclusion-body myositis.

87. (Previously Presented) A method for preventing or treating a disease characterized by an accumulation of amyloid deposits in the brain of a patient, comprising the step of administering an antibody which is targeted to an amyloid β peptide, thereby reducing the level of amyloid β in the brain of the patient.

88. (Previously Presented) A method for delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof, comprising the step of administering an antibody which is targeted to an amyloid β peptide, or to fragment thereof, thereby delaying or inhibiting or suppressing accumulation of amyloid β peptide or fragment thereof in the brain.

89. (Previously Presented) The method of claim 87, wherein the antibody is directed to the amyloid precursor protein, or a naturally occurring form of amyloid β.

90. (Previously Presented) The method of claim 88, wherein the antibody is directed to the amyloid precursor protein, or fragment thereof.

91. (Previously Presented) The method of claim 87, wherein the antibody is directed to an epitope comprising the first N terminal residue of natural Aβ.

92. (Previously Presented) The method of claim 87, wherein the antibody is directed to an epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of Aβ.

93. (Previously Presented) The method of claim 88, wherein the antibody is directed to N-terminus-truncated amyloid β peptide fragment.

94. (Previously Presented) The method of claim 87, wherein the antibody is directed to an epitope comprising the C-terminal amino acid of a naturally occurring form of amyloid β.

95. (Previously Presented) The method of claim 87, wherein the antibody is directed to the Aβ 33-42 epitope.

96. (Previously Presented) The method of claim 95, wherein the antibody is 21F12.

97. (Previously Presented) The method of claim 88, wherein the antibody is directed to C-terminus-truncated amyloid β peptide fragment.

98. (Previously Presented) The method of claim 87, wherein the antibody is directed to the amyloid precursor protein, or a naturally occurring form of amyloid β.

99. (Previously Presented) The method of claim 88, wherein the antibody is directed to the amyloid precursor protein, or fragment thereof.

100. (Previously Presented) The method of claim 88, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody,
a bispecific or bifunctional antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

101. (Previously Presented) An antibody directed to an epitope comprising the first N terminal residue of natural Aβ.

102. (Previously Presented) The antibody of claim 101, wherein the epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of Aβ.

103. (Previously Presented) An antibody that is free-end specific and is targeted to the free N-terminus of amyloid β -peptide.

104. (Previously Presented) The method of claim 101, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific or bifunctional antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

105. (Previously Presented) A antibody directed to an epitope comprising the first N terminal residue of natural Aβ, wherein the N-terminal residue of the epitope is aspartate.

106. (Previously Presented) The antibody of claim 105, wherein the epitope selected from the group consisting of residues 1-5, 1-10, 1-12, 1-16, and 1-25 of Aβ.

107. (Previously Presented) A antibody that is free-end specific and is targeted to the free N-terminus of amyloid β -peptide, wherein the first amino acid of amyloid β -peptide of said is aspartate.

108. (Previously Presented) The antibody of claim 107, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

109. (Previously Presented) A antibody directed to an epitope consisting of a fragment of amyloid β peptide fragment.

110. (Previously Presented) The antibody of claim 109, wherein the epitope is within residues 1-5, 5-10, 10-15, 15-20, 25-30, 10-20, 20-30, 10-25, 1-28, 1-10, or 1-16 of amyloid β.

111. (Previously Presented) An antibody that is free-end specific and is targeted to the free N terminus of N and/or C-terminus-truncated amyloid β peptide fragment.

112. (Previously Presented) The antibody of claim 109, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

113. (Previously Presented) An antibody directed to an epitope comprising the C-terminal amino acid of a naturally occurring form of amyloid β.

114. (Previously Presented) The antibody of claim 113, which is directed to the Aβ 33-42 epitope.

115. (Previously Presented) An antibody that is free-end specific and is targeted to the free C-terminus of N- and/or C-terminus-truncated amyloid β peptide fragment.

116. (Previously Presented) The antibody of claim 115, wherein the antibody is a monoclonal antibody, a humanized antibody, a chimeric antibody, a bispecific antibody, an artificial antibody, a scFv antibody or a F(ab), or fragment thereof.

117. (Previously Presented) A single chain or artificial antibody that is free-end specific and is targeted to the free C-terminus of the amyloid β -peptide Aβ 1-42.

118. (Previously Presented) A single chain or artificial antibody that is free-end specific and is targeted to the free C-terminus of the amyloid β -peptide Aβ 1-42.

119. (Previously Presented) A pharmaceutical composition comprising an amount of the antibody of claim 103 and a pharmaceutical acceptable carrier.

120. (Previously Presented) The pharmaceutical composition of claim 64, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

121. (Previously Presented) The pharmaceutical composition of claim 64, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

122. (Previously Presented) The pharmaceutical composition of claim 64, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intaranially, or intracephalically.

123. (Previously Presented) A pharmaceutical composition comprising an amount of the antibody of claim 107 and a pharmaceutical acceptable carrier.

124. (Previously Presented) The pharmaceutical composition of claim 123, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

125. (Previously Presented) The pharmaceutical composition of claim 123, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

126. (Previously Presented) The pharmaceutical composition of claim 123, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intaranially, or intracephalically.

127. (Previously Presented) A pharmaceutical composition comprising an amount of the antibody of claim 111 and a pharmaceutical acceptable carrier.

128. (Previously Presented) The pharmaceutical composition of claim 127, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

129. (Previously Presented) The pharmaceutical composition of claim 127, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

130. (Previously Presented) The pharmaceutical composition of claim 127, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intaranially, or intracephalically.

131. (Previously Presented) A pharmaceutical composition comprising an amount of the antibody of claim 115 and a pharmaceutical acceptable carrier.

132. (Previously Presented) The pharmaceutical composition of claim 131, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

133. (Previously Presented) The pharmaceutical composition of claim 131, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

134. (Previously Presented) The pharmaceutical composition of claim 131, wherein the composition is administered subcutaneously, intravenously, intradermally,

intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intaranially, or intracephalically.

135. (Previously Presented) A pharmaceutical composition comprising an amount of the antibody of claim 118 and a pharmaceutical acceptable carrier.

136. (Previously Presented) The pharmaceutical composition of claim 135, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially or orally.

137. (Previously Presented) The pharmaceutical composition of claim 135, wherein the composition is administered subcutaneously, intravenously, intramuscularly, intraperitoneally, intracranially, orally, topically or intravenously.

138. (Previously Presented) The pharmaceutical composition of claim 135, wherein the composition is administered subcutaneously, intravenously, intradermally, intramuscularly, intraperitoneally, intracerebrally, intranasally, orally, transdermally, buccally, intra-arterially, intaranially, or intracephalically.

139. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 101, thereby treating the subject having Alzheimer's Disease.

140. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 103, thereby treating the subject having Alzheimer's Disease.

141. (Previously Presented) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the

antibody of claim 103, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

142. (Previously Presented) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 103, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid β peptide in the brain.

143. (Previously Presented) A method for delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 103, thereby delaying or inhibiting or suppressing accumulation of amyloid β peptide or fragment thereof in the brain.

144. (Previously Presented) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 103.

145. (Previously Presented) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 103, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof.

146. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 107, thereby treating the subject having Alzheimer's Disease.

147. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 107, thereby treating the subject having Alzheimer's Disease.

148. (Previously Presented) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of claim 107, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

149. (Previously Presented) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 107, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid β peptide in the brain.

150. (Previously Presented) A method for delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 107, thereby delaying or inhibiting or suppressing accumulation of amyloid β peptide or fragment thereof in the brain.

151. (Previously Presented) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 107.

152. (Previously Presented) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 107, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof.

153. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 111, thereby treating the subject having Alzheimer's Disease.

154. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 111, thereby treating the subject having Alzheimer's Disease.

155. (Previously Presented) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of claim 111, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

156. (Previously Presented) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 111, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid β peptide in the brain.

157. (Previously Presented) A method for delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 111, thereby delaying or inhibiting or suppressing accumulation of amyloid β peptide or fragment thereof in the brain.

158. (Previously Presented) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 111.

159. (Previously Presented) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 111, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof.

160. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 115, thereby treating the subject having Alzheimer's Disease.

161. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 115, thereby treating the subject having Alzheimer's Disease.

162. (Previously Presented) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of claim 115, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

163. (Previously Presented) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 115, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid β peptide in the brain.

164. (Previously Presented) A method for delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 115, thereby delaying or inhibiting or suppressing accumulation of amyloid β peptide or fragment thereof in the brain.

165. (Previously Presented) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 115.

166. (Previously Presented) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof, comprising the step of administering

the antibody of claim 115, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof.

167. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 118, thereby treating the subject having Alzheimer's Disease.

168. (Previously Presented) A method of treating a subject having Alzheimer's Disease, comprising the step of administering the antibody of claim 118, thereby treating the subject having Alzheimer's Disease.

169. (Previously Presented) A method of treating a subject having a disease or disorder characterized by amyloid beta deposition comprising the step of administering the antibody of claim 118, thereby treating the subject having a disease or disorder characterized by amyloid beta deposition.

170. (Previously Presented) A method for eliminating, reducing the risk of, or delaying the onset of a disease characterized by amyloid deposits, comprising the step of administering the antibody of claim 118, thereby eliminating or reducing the risk of, or delaying the accumulation of amyloid β peptide in the brain.

171. (Previously Presented) A method for delaying or inhibiting or suppressing the accumulation of an amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 118, thereby delaying or inhibiting or suppressing accumulation of amyloid β peptide or fragment thereof in the brain.

172. (Previously Presented) A method for preventing or ameliorating the neuropathology associated with amyloidogenic disease, comprising the step of administering the antibody of claim 118.

173. (Previously Presented) A method for delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof, comprising the step of administering the antibody of claim 118, thereby delaying or inhibiting or suppressing the neurotoxicity of amyloid β peptide or fragment thereof.

174. (Previously Presented) A method for sequestering Aβ from its bound, circulating form in the blood in a patient in need thereof, comprising:

a) administering an agent having a binding affinity for the Aβ in the blood of the patient in need thereof;

b) sequestering Aβ in the blood, thereby decreasing Aβ levels in the brain of the patient.

175. (Previously Presented) The method according to claim 174, wherein the patient is suffering from a disease characterized by Aβ amyloid deposits.

176. (Previously Presented) The method of claim 175, wherein the disease characterized by amyloid deposits is selected from Alzheimer's Disease and Alzheimer's Disease associated with Down's syndrome.

177. (Previously Presented) A method of treating a patient having an amyloid deposition disease comprising the step of administering to the patient a) a therapeutically effective dose of at least one immunoglobulin polypeptide or a fragments thereof, wherein the immunoglobulin polypeptide or fragment thereof binds to an amyloid fibril; and b) a pharmaceutically acceptable carrier.

178. (Previously Presented) The method of claim 177, wherein the immunoglobulin polypeptide or fragment thereof is raised against an immunoglobulin light-chain.

179. (Previously Presented) The method of claim 177, wherein binding of the immunoglobulin polypeptide or fragment thereof opsonizes the amyloid fibril.

180. (Previously Presented) The method of claim 177, wherein the immunoglobulin polypeptide or fragment thereof is a monoclonal antibody.

181. (Previously Presented) The method of claim 180, wherein the monoclonal antibody is a humanized antibody.

182. (Previously Presented) The method of claim 180, wherein the monoclonal antibody is a chimeric antibody.

183. (Previously Presented) The method of claim 182, wherein the chimeric antibody is a humanized antibody.

184. (Previously Presented) The method of claim 182, wherein the antibody is a labeled antibody.

185. (Previously Presented) An immunoglobulin polypeptide or fragment thereof that binds to an amyloid fibril and is effective to enhance the cellular immune response of a patient to remove disease-associated amyloid fibril deposits.

186. (Previously Presented) The immunoglobulin polypeptide or fragment thereof of claim 185, wherein the immunoglobulin polypeptide or fragment thereof is a monoclonal antibody or fragment thereof.

187. (Previously Presented) The immunoglobulin or fragment thereof of claim 186, wherein the monoclonal antibody is a humanized antibody.

188. (Previously Presented) The immunoglobulin polypeptide or fragment thereof of claim 186, wherein the monoclonal antibody is a chimeric antibody.

189. (Previously Presented) The immunoglobulin polypeptide or fragment thereof of claim 188, wherein the chimeric antibody is a humanized antibody.

190. (Previously Presented) The immunoglobulin polypeptide or fragment thereof of claim 186, wherein the antibody is a labeled antibody.

191. (Previously Presented) The immunoglobulin polypeptide or fragment thereof of claim 185, wherein the immunoglobulin polypeptide or fragment thereof has been raised against synthetic amyloid fibrils.

192. (Previously Presented) A pharmaceutical composition comprising the immunoglobulin peptide or fragment thereof of claim 185.

193. (Previously Presented) A nucleic acid molecule which encodes a polypeptide comprising at least a hypervariable region of the immunoglobulin polypeptide of claim 185.

194. (Previously Presented) A host cell comprising a nucleic acid molecule of claim 193.

195. (Previously Presented) A method of producing an immunoglobulin polypeptide comprising the step of culturing the host cell of claim 194.